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     3 OCT 23
                 The Derwent World Patents Index suite of databases on STN
                 has been enhanced and reloaded
NEWS 4 OCT 30 CHEMLIST enhanced with new search and display field
      5 NOV 03 JAPIO enhanced with IPC 8 features and functionality
NEWS
NEWS
     6 NOV 10 CA/CAplus F-Term thesaurus enhanced
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                 STN Express with Discover! free maintenance release
Version
                 8.01c now available
NEWS 8
         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit
increased
                 to 50,000
NEWS 9
         DEC 01
                CAS REGISTRY updated with new ambiguity codes
NEWS 10 DEC 11 CAS REGISTRY chemical nomenclature enhanced
NEWS 11
         DEC 14
                 WPIDS/WPINDEX/WPIX manual codes updated
NEWS 12
         DEC 14
                 GBFULL and FRFULL enhanced with IPC 8 features and
                 functionality
NEWS 13
         DEC 18
                 CA/CAplus pre-1967 chemical substance index entries
enhanced
                 with preparation role
NEWS 14
         DEC 18
                 CA/CAplus patent kind codes updated
NEWS 15
                 MARPAT to CA/CAplus accession number crossover limit
         DEC 18
increased
                 to 50,000
NEWS 16
         DEC 18
                 MEDLINE updated in preparation for 2007 reload
NEWS 17
         DEC 27
                 CA/CAplus enhanced with more pre-1907 records
NEWS 18
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 19
         JAN 16 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 20
         JAN 16
                 IPC version 2007.01 thesaurus available on STN
NEWS 21 JAN 16 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification
data
NEWS 22
         JAN 22
                 CA/CAplus updated with revised CAS roles
NEWS 23 JAN 22
                 CA/CAplus enhanced with patent applications from India
NEWS 24
         JAN 29
                 PHAR reloaded with new search and display fields
NEWS 25
         JAN 29
                 CAS Registry Number crossover limit increased to 300,000
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multiple databases

NEWS 26 FEB 13 CASREACT coverage to be extended

NEWS 27 Feb 15 PATDPASPC enhanced with Drug Approval numbers

NEWS 28 Feb 15 RUSSIAPAT enhanced with pre-1994 records

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

NEWS X25 X.25 communication option no longer available

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ENTRY SESSION
0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 14 FEB 2007 HIGHEST RN 921041-62-5 DICTIONARY FILE UPDATES: 14 FEB 2007 HIGHEST RN 921041-62-5

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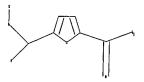
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=>

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chain nodes:
6 7 8 9 10 12 13
ring nodes:
1 2 3 4 5
chain bonds:
2-8 5-6 6-7 6-12 8-9 8-13 9-10
ring bonds:
1-2 1-5 2-3 3-4 4-5
exact/norm bonds:
6-7 6-12 8-9
exact bonds:
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1-2 1-5 2-3 2-8 3-4 4-5 5-6 8-13 9-10 isolated ring systems : containing 1 :

G1:0, N, Cy, Ak

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 12:CLASS 13:CLASS

L1 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 16:01:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1787 TO ITERATE

100.0% PROCESSED 1787 ITERATIONS 36 ANSWERS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 33205 TO 38275
PROJECTED ANSWERS: 360 TO 1080

L2 36 SEA SSS SAM L1

=> s 11 ful

FULL SEARCH INITIATED 16:01:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 35075 TO ITERATE

100.0% PROCESSED 35075 ITERATIONS 572 ANSWERS

SEARCH TIME: 00.00.01

L3 572 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
172.10
172.31

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FILE COVERS 1907 - 15 Feb 2007 VOL 146 ISS 8 FILE LAST UPDATED: 14 Feb 2007 (20070214/ED)

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http://www.cas.org/infopolicy.html

=> s 13

L4 105 L3

=> s 14 and amino acid 1105695 AMINO 44 AMINOS

1105713 AMINO

(AMINO OR AMINOS)

4314120 ACID 1568872 ACIDS 4815460 ACID

(ACID OR ACIDS)

703931 AMINO ACID

(AMINO(W)ACID)

L5 12 L4 AND AMINO ACID

=> d 15 ibib hitstr abs 1-12

L5 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:795651 CAPLUS

DOCUMENT NUMBER: 145:230883

TITLE: Preparation of insulin derivatives

INVENTOR(S): Kodra, Janos Tibor; Garibay, Patrick William;

Hoeg-Jensen, Thomas; Jonassen, Ib; Madsen, Peter;

Tagmose, Tina Moeller

PATENT ASSIGNEE(S):

SOURCE:

Novo Nordisk A/S, Den. PCT Int. Appl., 100pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2006082204
                          Α1
                                20060810
                                            WO 2006-EP50593
                                                                    20060201
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                            DK 2005-157
                                                                    20050202
OTHER SOURCE(S):
                         MARPAT 145:230883
IT
     905302-47-8P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
     (Reactant or reagent)
        (preparation of insulin derivs.)
RN
     905302-47-8 CAPLUS
CN
     2-Furancarboxylic acid, 5-[[[3-(1,1-dimethylethoxy)-3-
     oxopropyl]amino]methyl]- (9CI) (CA INDEX NAME)
```

HO₂C
$$\bigcirc$$
 CH₂-NH-CH₂-CH₂-C-OBu-t

AB The invention relates to insulin derivs. having a side chain attached either to the α -amino group of the N-terminal amino acid residue of the B chain or to the ϵ -amino group of a Lys residue present in the B chain of the parent insulin. The side chain

comprises at least one aromatic group, at least one free carboxylic acid

group or a group which is neg. charged at neutral pH, a fatty acid moiety

with 4 to 22 carbon atoms in the carbon chain, and possible linkers which

link the individual components in the side chain together via amide bonds.

Thus, NeB29-10-(4-carboxyphenylthio)decanoyl- γ -L-glutamyl desB30 human insulin was prepared by coupling of O-protected N-[10-(4-carboxyphenylthio)decanoyl]-L-glutamic acid (preparation given) with

human desB30 insulin and showed 101% insulin receptor binding, vs. 100% for human insulin.

```
REFERENCE COUNT:
                        9
                               THERE ARE 9 CITED REFERENCES AVAILABLE FOR
 THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT
     ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER:
                         2005:1078223 CAPLUS
 DOCUMENT NUMBER:
                         143:347451
 TITLE:
                         Synthesis of chiral furan amino
                         acids as novel peptide building blocks
 INVENTOR(S):
                         Chakraborty, Tushar Kanti; Tapadar, Subhasish
 PATENT ASSIGNEE(S):
                         India
 SOURCE:
                         U.S. Pat. Appl. Publ., 20 pp.
                         CODEN: USXXCO
 DOCUMENT TYPE:
                         Patent
 LANGUAGE:
                         English
 FAMILY ACC. NUM. COUNT:
 PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE ·
                                           APPLICATION NO.
                                            -----
     US 2005222088
                          Α1
                                20051006
                                            US 2004-814525
                                                                   20040331
     WO 2005095371
                                         WO 2004-IB3528
                          Α1
                                20051013
                                                                   20041028
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE,
             SN, TD, TG
PRIORITY APPLN. INFO.:
                                          US 2004-814525 A 20040331
OTHER SOURCE(S):
                         CASREACT 143:347451; MARPAT 143:347451
     828259-68-3P 828259-69-4P 828259-70-7P
     828259-72-9P 828259-74-1P 828259-76-3P
     866045-72-9P 866045-99-0P 866046-01-7P
     866046-02-8P 866046-03-9P 866046-05-1P
     866046-07-3P 866046-08-4P 866046-10-8P
     866046-11-9P 866046-12-0P 866046-14-2P
     866046-16-4P 866046-17-5P 866046-19-7P
     866046-20-0P 866046-21-1P 866046-23-3P
     866046-25-5P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
      (Preparation)
         (synthesis of chiral furan amino acids as novel
        peptide building blocks)
 RN
     828259-68-3 CAPLUS
     2-Furancarboxylic acid,
 5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]eth
```

yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 828259-69-4 CAPLUS

CN 2-Furancarboxylic acid,

5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 828259-70-7 CAPLUS

CN 2-Furancarboxylic acid,

5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 828259-72-9 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-aminoethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 828259-71-8 CMF C7 H9 N O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 828259-74-1 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-amino-2-methylpropyl]-, trifluoroacetate

(9CI) (CA INDEX NAME)

CM 1

CRN 828259-73-0

CMF C9 H13 N O3

Absolute stereochemistry.

CM 2

CM 1.

.CRN 828259-75-2 CMF C13 H13 N O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 866045-72-9 CAPLUS
CN 2-Furancarboxylic acid,
5-[(S)-[[(1,1-dimethylethoxy)carbonyl]amino]phenyl
 methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866045-99-0 CAPLUS
CN 2-Furancarboxylic acid,
5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]eth
 y1]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866046-01-7 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-aminoethyl]-, methyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 866046-00-6 CMF C8 H11 N O3

Absolute stereochemistry.

CM 2

RN 866046-02-8 CAPLUS
CN 2-Furancarboxylic acid,
5-[(1R)-1-[[(1,1-dimethylethoxy)carbonyl]amino]eth
 y1]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866046-03-9 CAPLUS
CN 2-Furancarboxylic acid,
5-[(1R)-1-[[(1,1-dimethylethoxy)carbonyl]amino]eth
 y1]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

CM 1

CRN 866046-04-0 CMF C8 H11 N O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 866046-07-3 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1R)-1-aminoethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 866046-06-2 CMF C7 H9 N O3

Absolute stereochemistry.

CM · 2

RN 866046-08-4 CAPLUS
CN 2-Furancarboxylic acid,
5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2 methylpropyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866046-10-8 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-amino-2-methylpropyl]-, methyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 866046-09-5 CMF C10 H15 N O3

Absolute stereochemistry.

CM 2

RN 866046-11-9 CAPLUS
CN 2-Furançarboxylic acid,
5-[(1R)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2 methylpropyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866046-12-0 CAPLUS
CN 2-Furancarboxylic acid,
5-[(1R)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2 methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$HN$$
 OBu-t R $Pr-i$

RN 866046-14-2 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1R)-1-amino-2-methylpropyl]-, methyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 866046-13-1 CMF C10 H15 N O3

Absolute stereochemistry.

CM 2

CRN . 76-05-1 CMF C2 H F3 O2

RN 866046-16-4 CAPLUS
CN 2-Furancarboxylic acid, 5-[(1R)-1-amino-2-methylpropyl]-,
trifluoroacetate

(9CI) (CA INDEX NAME)

CM 1

CRN 866046-15-3 CMF C9 H13 N O3

Absolute stereochemistry.

CM 2

Absolute stereochemistry.

RN 866046-19-7 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-amino-2-phenylethyl]-, methyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 866046-18-6 CMF C14 H15 N O3

Absolute stereochemistry.

CM 2

RN 866046-20-0 CAPLUS
CN 2-Furancarboxylic acid,
5-[(1R)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2phenylethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866046-21-1 CAPLUS
CN 2-Furancarboxylic acid,
5-[(1R)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2 phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866046-23-3 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1R)-1-amino-2-phenylethyl]-, methyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 866046-22-2 CMF C14 H15 N O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CM 1

CRN 866046-24-4 CMF C13 H13 N O3

Absolute stereochemistry.

CM 2

GI

$$\begin{array}{c|c} RNH & & & \\ & & & \\ R2 & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$$

· AB The invention provides chiral furan amino acids I (R = 1 H, including HCl and CF3CO2H salts, Ac, Boc, Cbz, Fmoc; R1 = OH, alkoxy,

an amino group, etc.; R2 = amino acid side chain), an important class of conformationally-constrained peptide-based mols. that

can be used as dipeptide isosteres in peptidomimetic studies. I were prepared from N-terminal-protected amino aldehydes derived from the corresponding N-terminal-protected protected L- or D-amino acids. Thus, (S)-I (R = Boc, R1 = OH, R2 = Me) was prepared by a multistep sequence starting with condensation of Boc-L-alaninal with 3,4-O-isopropylidene-1,1-dibromo-1-butene-3,4-diol.

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:674799 CAPLUS

DOCUMENT NUMBER: 143:306538

TITLE: Furanoid sugar amino acids as

dipeptide mimics in design of analogs of vasoactive

intestinal peptide receptor binding inhibitor Prasad, S.; Mathur, A.; Jaggi, M.; Sharma, R.;

Gupta,

SOURCE:

AUTHOR(S):

N.; Reddy, V. R.; Sudhakar, G.; Kumar, S. U.;

Kumar,

S. K.; Kunwar, A. C.; Chakraborty, T. K.

CORPORATE SOURCE: Dabur Research Foundation, Sahibabad, India

Journal of Peptide Research (2005), 66(2), 75-84

CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER:

Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal¹ LANGUAGE: English

840540-68-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL

Absolute stereochemistry.

IT 934-65-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

(preparation of furanoid sugar amino acid-containing peptides, and evaluation of their in vitro anticancer activity)

RN 934-65-6 CAPLUS

CN 2-Furancarboxylic acid, 5-(aminomethyl)- (9CI) (CA INDEX NAME)

$${\tt HO_2C} \underbrace{{\tt O}}_{\tt CH_2-NH_2}$$

GΙ

AB This study describes the development of peptidomimetic analogs of the potent vasoactive intestinal peptide (VIP) receptor binding inhibitor, Leul-Met2-Tyr3-Pro4-Thr5-Tyr6-Leu7-Lys8-OH (I), by incorporating furanoid

sugar amino acids II (cis isomers), III and IV into
the peptide. II-IV were used as dipeptide isosteres to replace
Tvr3-Pro4

or Pro4-Thr5 in sequence I. The resulting peptides were tested for their

anticancer activities in vitro, following the standard MTT assay on a panel of

human cancer cell lines. One of the potent analogs was tested in vivo for

tumor regression on primary colon tumor xenografted nude mice. These exptl. results suggest that majority of these analogs show either retention or enhancement of biol. activity.

REFERENCE COUNT:

25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:122788 CAPLUS

DOCUMENT NUMBER:

142:219563

TITLE:

Preparation of novel peptides comprising furanoid

sugar amino acids for the

treatment of cancer

INVENTOR(S):

Prasad, Sudhanand; Chakraborty, Tushar Kanti;

Mathur,

Archna; Jaggi, Manu; Kunwar, Ajit Chand; Mukherjee,

Rama; Burman, Anand C.

PATENT ASSIGNEE(S):

SOURCE:

Dabur Research Foundation, USA U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 2005032707 US 7060678	A1 B2	20050210 20060613	US 2003-638107 ·	20030808		
PRIORITY APPLN. INFO.:		•	US 2003-638107	20030808		

OTHER SOURCE(S): MARPAT 142:219563

IT 840540-68-3P 840540-71-8P 840540-72-9P

840540-73-0P 840540-76-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptides comprising furanoid sugar amino acids for treatment of cancer)

RN 840540-68-3 CAPLUS

CN L-Leucine, L-methionyl-5-(aminomethyl)-2-furancarbonyl-L-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN840540-71-8 CAPLUS

CN L-Lysine,

L-leucyl-L-methionyl-L-tyrosyl-5-(aminomethyl)-2-furancarbonyl-Ltyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

O
$$CO_2H$$
N S $(CH_2)_4$
NH2

840540-72-9 CAPLUS RN

CN L-Lysine,

L-leucyl-L-methionyl-5-(aminomethyl)-2-furancarbonyl-L-tyrosyl-Lleucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 840540-73-0 CAPLUS

CN L-Lysine,

L-leucyl-L-methionyl-L-tyrosyl-5-(aminomethyl)-2-furancarbonyl-L-threonyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A HO₂C

PAGE 1-B

`Bu−i

─ OH

RN 840540-76-3 CAPLUS

CN L-Lysine,

L-leucyl-L-methionyl-5-(aminomethyl)-2-furancarbonyl-L-threonyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

IT 934-65-6P 160938-85-2P 432550-39-5P 840540-55-8P

```
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
     (Reactant or reagent)
        (preparation of peptides comprising furanoid sugar amino
        acids for treatment of cancer)
RN
     934-65-6 CAPLUS
     2-Furancarboxylic acid, 5-(aminomethyl)- (9CI)
CN
                                                        (CA INDEX NAME)
RN
     160938-85-2 CAPLUS
     2-Furancarboxylic acid,
CN
5-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-
            (CA INDEX NAME)
                 -.. NH-
RN
     432550-39-5 CAPLUS
CN
     2-Furancarboxylic acid,
5-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-,
     methyl ester (9CI) (CA INDEX NAME)
                                                 193
               CH2 - NH - C - OBu-t
RN
     840540-55-8
                  CAPLUS
CN
     2-Furancarboxylic acid, 5-(aminomethyl)-, trifluoroacetate (9CI)
     INDEX NAME)
     CM
          1
     CRN
          934-65-6
     CMF
          C6 H7 N O3
```

CM 2

CRN 76-05-1 CMF C2 H F3 O2

AB The invention relates to title anticancer peptides X-Met-A1-A2-A3-Tyr-Leu-

Y [X is Leu or deleted, Y is Lys or deleted, Al is Tyr or a furanoid sugar

amino acid, A2 is Pro or a furanoid sugar amino acid, A3 is Thr or a furanoid sugar amino acid

; A1-A2-A3, A1-A2, A2-A3 or A2 may be replaced by a furanoid sugar amino acid acid] and their pharmaceutically-acceptable

salts and to methods for synthesis of the peptides and the furanoid sugar

amino acids. Thus, Met-Saal-Tyr-Leu [Saal is a

5-(aminomethyl)-2-furancarboxylic acid residue] was prepared by the solid-phase method and assayed for percent cytotoxicity on various n

tumor cell lines.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

Merr 8/19/04 2004

FORMAT

L5 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1062611 CAPLUS

DOCUMENT NUMBER: 142:156308

TITLE: Cyclic trimers of chiral furan amino

acids

AUTHOR(S): Chakraborty, Tushar K.; Tapadar, Subhasish; Raju,

Τ.

Venugopal; Annapurna, J.; Singh, Harjinder

CORPORATE SOURCE: Indian Institute of Chemical Technology, Hyderabad,

500 007, India

SOURCE: Synlett (2004), (14), 2484-2488

CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER:

Georg Thieme Verlag

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 142:156308

828259-68-3P 828259-69-4P 828259-70-7P

828259-72-9P 828259-74-1P 828259-76-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

RN

(Reactant or reagent)

(preparation of cyclic tripeptides from chiral furan amino acids by cyclooligomerization, their structures, complexation with tetrabutylammonium salts and antimicrobial activity)

828259-68-3 CAPLUS

CN 2-Furancarboxylic acid,

5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]eth yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 828259-69-4 CAPLUS

2-Furancarboxylic acid,

5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2methylpropyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

· RN 828259-70-7 CAPLUS

CN2-Furancarboxylic acid,

5-[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]-2phenylethyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 828259-72-9 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-aminoethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 828259-71-8 CMF C7 H9 N O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 828259-74-1 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-amino-2-methylpropyl]-, trifluoroacetate

(9CI) (CA INDEX NAME)

CM 1

CRN 828259-73-0 CMF C9 H13 N O3 Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 828259-76-3 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S)-1-amino-2-phenylethyl]-, trifluoroacetate

(9CI) (CA INDEX NAME)

CM 1

CRN 828259-75-2

CMF C13 H13 N O3

Absolute stereochemistry.

CM 2

CRN 76-05-1

CMF C2 H F3 O2

```
F-C-CO2H
  F
```

AB Chiral furan amino acids were synthesized as novel peptide building blocks. Cyclooligomerization of these monomers by a single-step process led to the selective formation of chiral C3-sym. cyclic trimers, which were studied for their structures and properties, like anion binding and antimicrobial activities.

REFERENCE COUNT:

THERE ARE 70 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

70

ACCESSION NUMBER:

2002:530862 CAPLUS

DOCUMENT NUMBER:

137:348153

TITLE:

A new pseudopeptide motif for designing specific DNA-binding compounds capable of recognizing long

DNA

sequences

AUTHOR(S):

Nikitin, A. M.; Rodin, S. A.; Pis'menskii, V. F.;

Surovaya, A. N.; Gursky, G. V.

CORPORATE SOURCE:

Engelhardt Institute of Molecular Biology, Russian

Academy of Sciences, Moscow, 119991, Russia

SOURCE:

Doklady Biochemistry and Biophysics (2002), 384,

167-171

CODEN: DBBOAL; ISSN: 1607-6729

· PUBLISHER:

MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 137:348153

474380-11-5P IT

> RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(new pseudopeptide motif for designing specific DNA-binding compds. capable of recognizing long DNA sequences)

474380-11-5 CAPLUS RN

CN Propanediamide, N-[5-[[[5-[[[3-(dimethylamino)propyl]amino]carbonyl]-1-

propyl-1H-pyrrol-3-yl]amino]carbonyl]-1-propyl-1H-pyrrol-3-yl]-N'-[[5-[[[2-[[5-[[5-[[5-[[5-[[3-(dimethylamino)propyl]amino]carbonyl]-1-propyl-1Hpyrrol-3-yl]amino]carbonyl]-1-propyl-1H-pyrrol-3-yl]amino]carbonyl]-2furanyl]methyl]amino]-2-oxoethyl]amino]carbonyl]-2-furanyl]methyl]-(9CI)

(CA INDEX NAME)

PAGE 1-C

IT 474380-09-1 474380-10-4

RL: RCT (Reactant); RACT (Reactant or reagent) (new pseudopeptide motif for designing specific DNA-binding compds. capable of recognizing long DNA sequences)

RN 474380-09-1 CAPLUS

CN 2-Furancarboxylic acid,

5-[[[3-[[5-[[[5-[[[3-(dimethylamino)propyl]amino]c arbonyl]-1-propyl-1H-pyrrol-3-yl]amino]carbonyl]-1-propyl-1H-pyrrol-3-yl]amino]-1,3-dioxopropyl]amino]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

EtO-C

RN 474380-10-4 CAPLUS CN 1H-Pyrrole-2-carboxamide, 4-

1H-Pyrrole-2-carboxamide, 4-[[[5-[[(aminoacetyl)amino]methyl]-2-

furanyl] carbonyl] amino] -N - [5 - [[[3 - (dimethylamino)propyl] amino] carbonyl] - 1 - propyl - 1H - pyrrol - 3 - yl] - 1 - propyl - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & & \\$$

AB A novel approach to the synthesis of specific DNA-binding compds. that can

selectively bind to DNA regions with specified nucleotide sequence is proposed. The approach is based on the use of a combination of pyrrole(imidazole)carboxamide and new pseudopeptide fragments consisting

of glycine residues and unusual amino acid residues containing a five-membered aromatic heterocycle. Using this approach,

heterodimer containing two netropsin-like fragments linked via the new pseudopeptide motif has been synthesized. Exptl. results provide evidence

that the conjugates consisting of pyrrole(imidazole)carboxamide units and

new pseudopeptide fragments can recognize long DNA sequences. REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS \cdot

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

а

L5 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:97586 CAPLUS

DOCUMENT NUMBER: 137:6375

TITLE: Cyclic trimer of 5-(aminomethyl)-2-furancarboxylic

acid as a novel synthetic receptor for carboxylate

recognition

AUTHOR(S): Chakraborty, Tushar K.; Tapadar, Subhasish; Kiran

Kumar, S.

CORPORATE SOURCE: Indian Institute of Chemical Technology, Hyderabad,

500 007, India

SOURCE: Tetrahedron Letters (2002), 43(7), 1317-1320

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd. DOCUMENT TYPE: Journal LANGUAGE: English OTHER SOURCE(S): CASREACT 137:6375 432550-39-5P 432550-40-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of cyclic trimer of (aminomethyl) furancarboxylic acid, NMR, and binding of tetrabutylammonium acetate) RN432550-39-5 CAPLUS CN 2-Furancarboxylic acid, 5-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-, methyl ester (9CI) (CA INDEX NAME) CH2-NH-432550-40-8 RNCAPLUS CN 2-Furancarboxylic acid, 5-(aminomethyl)-, methyl ester, trifluoroacetate (9CI) (CA INDEX NAME) CM 1 73751-06-1 CRN CMF C7 H9 N O3

CM 2

AΒ A novel 18-membered cyclic oligopeptide based on 5-(aminomethyl)-2furancarboxylic acid (Faa) is developed as an excellent receptor for carboxylate binding having an association constant of 8.64+103 M-1 for tetrabutylammonium acetate in CD3CN. The synthesis of cyclo(Faa)3 was achieved by a high-yielding cyclotrimerization reaction of the unfunctionalized furan amino acid Faa.

REFERENCE COUNT:

34

THERE ARE 34 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:780851 CAPLUS

DOCUMENT NUMBER:

135:344724

TITLE:

Preparation of amino acid amide

and dipeptide derivatives and antiviral drugs

containing the same

INVENTOR(S):

Yamazaki, Toru; Maruoka, Hiroshi; Suzuki, Shigeru;

Mukade, Tsutomu; Hirose, Kunitaka; Yanaka, Mikiro;

Yamamoto, Naoki

PATENT ASSIGNEE(S):

Kureha Chemical Industry Co., Ltd., Japan

SOURCE:

· PCT Int. Appl., 226 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KIN	IND DATE		APPLICATION NO.						DATE					
WO 2001079168			A1	1 20011025			WO 2001-JP3123						20010411				
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
	•	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,
		VN,	YU,	ZA,	ZW												
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
AU 2001048753		A5		20011030			AU 2001-48753					20010411					
CP	2405	690			A1		2002	1009	(CA 2	001-	2405	690		2	0010	411
EP 1273571			A 1		2003	20030108 EP 2001-921809				20010411							
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR.	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2004092556 20040513 Α1 US 2002-257340 20021121

US 7098215 B2 20060829

PRIORITY APPLN. INFO.: JP 2000-114067 20000414 Α

> WO 2001-JP3123 20010411

OTHER SOURCE(S): MARPAT 135:344724

369653-20-3P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of amino acid amide and dipeptide derivs.

as antiretroviral drugs for treatment of AIDS)

369653-20-3 CAPLUS RN

2-Furancarboxamide, CN

N-[(1S)-1-[[(1-naphthalenylmethyl)amino]carbonyl]-4-

[(5,6,7,8-tetrahydro-8-quinolinyl)] amino]butyl]-5-[[(2-

pyridinylmethyl)amino]methyl]-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

x HCl

ΙT 369654-80-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent) .

(preparation of amino acid amide and dipeptide derivs.

as antiretroviral drugs for treatment of AIDS)

RN 369654-80-8 CAPLUS

CN 2-Furancarboxylic acid, 5-[[(2-pyridinylmethyl)amino]methyl]-, ethyl ester

(9CI) (CA INDEX NAME)

GI

AB Novel nitrogenous compds. represented by general formula A1-(CH2)n1-W-X-CH[(CH2)n2-A2]-Y-D [n1 = 0-3; n2 = 0-4; A1, A2 = (un)substituted guanidino or amidino, A3-B1-NR1-, A3-CR2A4-NR1-; wherein

A3, A4 = (un)substituted 5- to 12-membered mono- or polycyclic heterocyclyl which may be partially saturated; B1 = single bond, CR2R3; R1,

R2, R3 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl or alkynyl, or R2 is

bonded to R1 or R3 to form a ring; W = (un) substituted C1-7 alkylene, C2-7

alkenylene, C2-7 alkynylene, or group B [wherein group B = C3-10 mono- or

polycyclic alkylene, (un)substituted 6- to 15-membered ring mono or polycyclic aryl which may be partially saturated, or (un)substituted 6- to

15-membered ring mono or polycyclic heterocyclyl optionally containing 1--3 of

```
O, S, and N atoms and optionally partially saturated]; D =
-W1-G1-G2-W2-G3; W1
    = 0, S, (un) substituted NR4 or NHNR4 (R4 = H, -G1'-G1'-G2'-W2'-G3');
G1,
    G1' = single bond, (un) substituted C1-10 alkylene or C2-10 alkenylene
or
    alkynylene, etc.; G2, G2' = single bond, group B; W2, W2' = single
bond, O,
    S, (un) substituted NH, etc.; G3, G3' = H, (un) substituted and linear or
    branched C1-6 alkyl, C2-6 alkenyl, group B, etc.; X = -Z1-Z-Z2-;
    = CO, S, SO, SO2, (un) substituted CH2; Z1, Z2 = single bond, O, S,
     (un) substituted NH; Y = CO, S, SO, SO2] are prepared These compds.
possess
    excellent antiretroviral activity and protective activity for cells
    infected with HIV-1 and are useful for the treatment of AIDS or
    AIDS-related complications. Thus, N\alpha-deprotection of
    Na-Fmoc-N\delta-Boc-L-ornithine (1S)-1-(1-naphthyl)ethylamide with
    diethylamine in DMF followed by condensation with 4-[N-Boc-N-(1-
    methylimidazol-2-yl)aminomethyl]benzoic acid using 1-ethyl-3-(3-
    dimethylaminopropyl) carbodiimide hydrochloride and HOBt in DMF gave
    N\alpha-[4-[[(1-methylimidazol-2-yl)amino]methyl]benzoyl]-N\delta-Boc-L-
    ornithine N-[(1S)-1-(1-naphthyl)ethyl]amide which underwent
    N\delta-deprotection with a mixture of 4 M HCl/dioxane and methanol at room
    temperature for 2 h and reductive amination with
5,6,7,8-tetrahydroguinolin-8-
    one using sodium cyanoborohydride in methanol, followed by treatment
with
    HCl to give
(2S)-2-[[4-[[(1-methylimidazol-2-yl)amino]methyl]benzoyl]amino
    ]-5-(5,6,7,8-tetrahydroquinolin-8-ylamino)valeric acid
    N-[(1S)-1-(1-naphthyl)] amide hydrochloride (I.xHCl). I.xHCl in
vitro
    EC50 of 0.025 \mu M for inhibiting the cell injury of MT-4 cells infected
    with HIV-1IIIB. A tablet formulation containing N\alpha-[4-(N-2-
picolylaminomethyl)-1-naphthylcarbonyl]-L-arginyl-D-3-(1-naphthyl)alanine
    was prepared
REFERENCE COUNT:
                               THERE ARE 2 CITED REFERENCES AVAILABLE FOR
THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT
    ANSWER 9 OF 12
                     CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         1999:566647 CAPLUS
DOCUMENT NUMBER:
                         131:286349
TITLE:
                         A straightforward synthesis of \alpha-furfuryl amide
                         via Lewis acid-mediated allylic substitution
AUTHOR(S):
                         Sun, Xue-Long; Kai, Toshitsugu; Takayanagi,
Hiroaki;
                         Furuhata, Kimio
CORPORATE SOURCE:
                         School Pharmaceutical Sciences, Kitasato Univ.,
Tokyo,
```

10/814,525

108, Japan

SOURCE:

Synlett (1999), (9), 1399-1400

CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER:

Georg Thieme Verlag

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 131:286349

246247-96-1P 246248-05-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

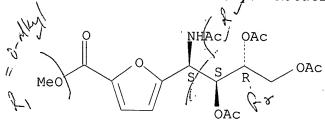
(Reactant or reagent)

(preparation of α -furfuryl amide via Lewis acid-mediated allylic substitution)

RN246247-96-1 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1s,2s,3R)-1-(acetylamino)-2,3,4tris(acetyloxy)butyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 246248-05-5 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1R,2S,3R)-1-(acetylamino)-2,3,4tris(acetyloxy)butyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ΙT 246247-97-2P 246247-98-3P 246247-99-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of α -furfuryl amide via Lewis acid-mediated allylic substitution)

246247-97-2 CAPLUS RN

CN 2-Furancarboxylic acid, 5-[(1S,2S,3R)-2,3,4-tris(acetyloxy)-1-[(methoxyacetyl)amino]butyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/814,525

RN 246247-98-3 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S,2S,3R)-2,3,4-tris(acetyloxy)-1-(benzoylamino)butyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 246247-99-4 CAPLUS

CN 2-Furancarboxylic acid, 5-[(1S,2S,3R)-2,3,4-tris(acetyloxy)-1-[(trichloroacetyl)amino]butyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

AB α -[5-(Methoxycarbonyl)furfuryl] amide was prepared by Lewis-acid-catalyzed allylic substitution of the corresponding α -(methoxycarbonyl)furfuryl carbinol acetate with various nitriles as nucleophiles, and the so formed amides were subjected to oxidative cleavage of the furan ring to afford N-protected polyhydroxy amino acids.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1999:354480 CAPLUS

DOCUMENT NUMBER:

131:5526

TITLE:

Preparation of p-aminomethylbenzoyl amino

acid derivatives

INVENTOR(S):

Delaszlo, Stephen E.; Hagmann, William K.

PATENT ASSIGNEE(S): SOURCE:

Merck & Co., Inc., USA PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIND DATE				APPLICATION NO.						DATE .			
	WO 9926923				A1	_	19990603		WO 1998-US24410					19981117					
		W:	AL,	AM,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GD,	GE,	
			HR,	HU,	ID,	IL,	IS,	JP,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LT,	LV,	MD,	MG,	
			MK,	MN,	MX,	NO,	ΝZ,	PL,	RO,	RU,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	
			UA,	US,	UZ,	VN,	YU,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	MT		·	
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ËS,	
								-		-	-	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
							-	MR,											
US 6191171											998-					9981	113		
	AU	9914	114		,	Α		1999	0615								9981		
PRIOR	ITY	APP:	LN.	INFO	.:					•	US 1	997-	6622	8 P		P 1	9971	120	
										I	GB 1	997-	2722	0	i	A 1	9971	223	
									•	1	WO 1	998-	US24	410		w 1	9981	117	

OTHER SOURCE(S): MARPAT 131:5526

IT 225527-86-6P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)

(preparation of p-aminomethylbenzoyl amino acid derivs.

as cell adhesion inhibitors)

RN 225527-86-6 CAPLUS

CN $[1,1'-Biphenyl]-4-propanoic acid, \alpha-[[[5-[[(3,5-$

dichlorophenyl)sulfonyl]amino]methyl]-2-furanyl]carbonyl]amino]-, (αS) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

AB P-aminomethylbenzoyl amino acids R1-L-NR2CHR4-Ar-CONR3CR5R6-X-Z [Ar = (un)substituted 1,4-phenylene or -heteroarylene; I. =

CO, OCO, NHCO or substituted iminocarbonyl, SO2, P(0)OH or esters, COCO; X

= a bond, CH2 or substituted methylene; Z = CO2H or esters or amides, PO3H2, PH(O)OH, S(O)mOH or their esters (m = 0-2), 5-tetrazolyl; R1 = (un)substituted alkyl, alkenyl, alkynyl, Cy (Cy = cycloalkyl, heterocyclyl, aryl, heteroaryl), Cy-alkyl, -alkenyl, or -alkynyl; R2 =

H, (up) substituted alkyl Cy Cy-alkyl P2 - H (up) s

(un) substituted alkyl, Cy, Cy-alkyl; R3 = H, (un) substituted alkyl or Cy;

R4 = H or R1; or R4 is joined to Ar at the ortho position; R5, R6 = H, alkyl, alkenyl, alkynyl, Cp, etc.] were prepared as antagonists of VLA-4

and/or $\alpha 4\beta 7$ and as such are useful in the inhibition or prevention of cell adhesion and cell-adhesion mediated pathologies. Thus,

N-[4-[(3,5-dichlorobenzenesulfonyl)amino]methyl]benzoyl]-L-4-fluorophenylalanine was prepared by coupling of N-Fmoc-4-aminomethylbenzoic

acid (Fmoc = fluorenylmethoxycarbonyl) with L-4-fluorophenylalanine tert-Bu ester, followed by deprotection, sulfonylation with

3,5-dichlorophenylsulfonyl chloride, and ester cleavage.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:356700 CAPLUS

DOCUMENT NUMBER: 122:133849

TITLE: Preparation of peptides cyclocondensed to

heterocyclic

rings useful as antagonists of platelet

glycoprotein

IIb/IIIa

INVENTOR(S): Wells, Gregory James; Wityak, John; Parthasarathy,

Anju; DeGrado, William Frank; Jackson, Sharon Anne;

Mousa, Shaker Ahmed

PATENT ASSIGNEE(S): Du Pont Merck Pharmaceutical Co., USA

SOURCE: PCT Int. Appl., 179 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	TENT	NO.			KIND DATE				APPLICATION NO.						DATE			
WC	WO 9411398					A1 19940526			,	.993-	 US10	19931112						
	₩:													ΚZ,	LK	, LV,	MG,	
	RW:				-			-			UA,	•		MC .	NT.	, PT,	SE.	
	•										MR,	-	-	-			OD,	
CA	2148	945			A1 19940526				(993-	2148	19931112						
ΑÜ	9455	A 19940608					994-	5594	19931112									
EF	672059				A1 19950920				994-	9013	19931112							
	R:	ÀΤ,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	ΙΤ,	LI,	LU,	NL	, PT,	SE	
JF	0850	3217			\mathbf{T}		1996	0409		JP 1	993-	5122	43			19931	112	
US	5773	411			Α		1998	0630	i	US 1	994-	3389	77			19941	114	
· US	5849	693			Α		1998	1215	1	US 1	997-	8204	24			19970	312	
PRIORIT	Y APP	LN.	INFO	.:						US 1	992-	9784	75		A	19921	.118	
									1	WO 1	.993-	us10	710		W	19931	.112	
									,	us 1	994-	3389	77		A 1	19941	114	

OTHER SOURCE(S): MARPAT 122:133849

IT 160938-84-1P, Methyl 5-aminomethyl-2-furoate hydrochloride

160938-85-2P 160938-87-4P 160938-88-5P

160938-89-6P 160938-91-0P 160938-93-2P

160938-94-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as intermediate for cyclopeptide derivative

antithrombotic)

RN 160938-84-1 CAPLUS

CN 2-Furancarboxylic acid, 5-(aminomethyl)-, methyl ester, hydrochloride (9CI) (CA INDEX NAME)

HC1

HO2C CH2-NH+C-OBu-t

RN 160938-87-4 CAPLUS

CN Methanone, (4-nitrophenyl)phenyl-, O-[[5-(aminomethyl)-2-furanyl]carbonyl]oxime, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 160938-86-3 CMF C19 H15 N3 O5

Ph Ph Ph NO2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 160938-88-5 CAPLUS

CN Carbamic acid,

RN 160938-89-6 CAPLUS

CN Butanoic acid, 3-[[(1,1-dimethylethoxy)carbonyl]amino]-4-[[[5-[[[(4-

nitrophenyl)phenylmethylene]amino]oxy]carbonyl]-2-furanyl]methyl]amino]-4oxo-, cyclohexyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160938-91-0 CAPLUS

Butanoic acid, CN

3-amino-4-[[[5-[[[(4-nitrophenyl)phenylmethylene]amino]oxy]carbonyl]-2-furanyl]methyl]amino]-4-oxo-, cyclohexyl ester, (S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM

160938-90-9 CRN CMF C29 H30 N4 O8

Absolute stereochemistry. Double bond geometry unknown.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN160938-93-2 CAPLUS

CN $L-\alpha$ -Asparagine, N2-[N-[N5-[imino[[(4-methylphenyl)sulfonyl]amino]met nitrophenyl)phenylmethylene]amino]oxy]carbonyl]-2-furanyl]methyl]-, cyclohexyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM1

CRN 160938-92-1 CMF C50 H62 N10 O13 S

Absolute stereochemistry. Double bond geometry unknown.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 160938-94-3 CAPLUS

CN L- α -Asparagine, N2-[N-[N2-[N-[(1,1-dimethylethoxy)carbonyl]-D-valyl]-N5-[imino[[(4-methylphenyl)sulfonyl]amino]methyl]-N2-methyl-L-

ornithyl]glycyl]-N-[[5-[[[(4-nitrophenyl)phenylmethylene]amino]oxy]carbon yl]-2-furanyl]methyl]-, cyclohexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. [I; R31 = 5-14 membered (unsatd.) (aromatic) heterocyclic ring

and N-oxide forms thereof; n, m = 0-3; R1, R22 = H, (substituted) alkyl,

alkenyl, alkynyl, cycloalkyl, bicycloalkyl, aryl, heterocyclyl; R1R2, R1R21, R22R23 = atoms to form (substituted) carbocyclic ring; R2 = H, alkyl; R21, R23 = H, (halo)alkyl, alkoxy, PhCH2; J, K, M = amino acid residues; L = Y(CH2)vCO; Y = NH, alkylimino, O, S; v = 1, 2], were prepared Thus, title compound II was prepared as the trifluoroacetate salt

via cyclocondensation of aminothiazoleacetate derivative III (preparation given)

with BOC-D-Val-NMeArg(Tos)-Gly-OH. Title compds. inhibited platelet aggregation with IC50's of <1 μM_{\odot}

L5 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1992:645218 CAPLUS

DOCUMENT NUMBER:

117:245218

TITLE:

Effect of amidinonaphthol derivatives on the ligand

binding site of the platelet integrin receptor GPIIb-IIIa. Chemical cross-linking approach Hodohara, Keiko; Fujiyama, Yoshihide; Inoue,

AUTHOR(S): Tetsuya;

Kitoh, Katsuyuki; Hirotani, Shuichi; Niwakawa, Mitsuyuki; Andoh, Akira; Bamba, Tadao; Hosoda,

Shiro;

Yasunaga, Kohjiro

CORPORATE SOURCE:

2nd Dep. Intern. Med., Shiga Univ. Med. Sci., Otsu,

520-21, Japan

SOURCE: 163 - 8

was

Nippon Kessen Shiketsu Gakkaishi (1992), 3(3),

DOCUMENT TYPE:

CODEN: NKSGEL; ISSN: 0915-7441

Journal

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Japanese

IT

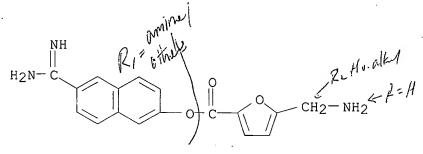
103232-13-9, FUT 6258

RL: BIOL (Biological study)

(platelet integrin receptor glycoprotein IIb/IIIa binding of RGD peptides inhibition by, of humans)

RN103232-13-9 CAPLUS

CN 2-Furancarboxylic acid, 5-(aminomethyl)-, 6-(aminoiminomethyl)-2naphthalenyl ester (9CI) (CA INDEX NAME)



AΒ The authors have previously reported that amidinonaphthol derivs,. which

have been developed as synthetic serine protease inhibitors, inhibited the

binding of adhesive proteins, such as fibrinogen and fibronectin, to ADP-stimulated platelets in a competitive manner. Because this effect

similar to those of Arg-Gly-Asp (RGD) peptides, the effect of amidinonaphthol derivs. on the chemical crosslinking of RGD-peptides to stimulated platelets was studied. The radiolabeled peptides including RGD-sequence (RGDSPASSKP and KYGRGDS) were coupled to platelets by subsequent addition of chemical crosslinking agent. Platelet membrane glycoprotein IIb-IIIa (GPIIb-IIIa) became radiolabeled with the RGD peptide, and stimulation with ADP increased the extent of crosslinking. Crosslinking of the labeled peptides to ADP-stimulated platelets was inhibited by excess of nonlabeled RGD peptides, an amino acid sequence corresponding to the carboxyl terminus of τ-chain of fibrinogen, fibrinogen and fibronectin, but not by

Gly-Arg-Gly-Glu-Ser-Pro (GRGESP). The crosslinking reaction was inhibited

by addition of amidinonaphthol derivs., such as nafamostat mesilate or FUT-6258, but less effectively by gabexate mesilate, which does not have

amidinonaphthol in the structure. The inhibitory effect of nafamostat mesilate was dose-dependent, and 50% inhibition was obtained at the concentration

of 6 + 10-5 M. This result suggested that amidinonaphthol derivs.

10/814,525

inhibited the binding of adhesive proteins to platelets by blockade of RGD peptide binding sites on GPIIb-IIIa.

TOTAL		
N		
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N		
36		
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